

Application No. 10/082,603

REMARKS

Claims 1-20 are pending. By this Amendment, claims 1, 9 and 16 are amended and new claims 18-20 are added. The amendment to claims 1, 9 and 16 are supported by the specification, for example, at page 5, lines 15-16; and page 11, lines 11-18. New claim 18 is supported by the specification, for example, at page 11, lines 11-18. New claims 19 and 20 are supported by the specification, for example, at claims 5 and 7, respectively, as filed. No new matter has been introduced by the present Amendment. Applicants have amended the abstract to conform to MPEP § 608.01(b).

Claims 1-17 currently stand as rejected, and Applicants respectfully request reconsideration of the rejections based upon the analysis below.

Rejection Under 35 U.S.C. § 102

The Examiner rejected claims 1, 2, 4, 6-10, and 14-16 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 5,940,548 to Yamada et al. (the Yamada Patent). More specifically, the Examiner asserted that the Yamada Patent "discloses an optical device with all the limitations set forth in the claims including: measuring a phase error of a plurality of waveguide cores of an arrayed waveguide grating using a low coherent optical interferometer (column 14 lines 34-41); adjusting the refractive indexes of the respective cores in accordance with the measured phase error values via a laser (column 14 lines 42-44)." Applicants have amended independent claims 1, 9 and 16 to more particularly point out Applicants' claimed invention. Applicants respectfully request reconsideration of the rejection in view of the following comments.

The Yamada patent does not disclose or suggest controlling the optical path length of cores of an arrayed waveguide grating to within three nanometers. In contrast, Applicants' invention, as claimed in independent claims 1, 9 and 16, relates to a method of optimizing a filter response of an arrayed waveguide grating comprising adjusting a respective optical path length

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of the cores in accordance with the respective phase error of the cores by adjusting a respective refracting index of the cores, wherein the optical path length is controlled to within three nanometers. Since the Yamada Patent does not disclose or suggest controlling the optical path length to within three nanometers, the Yamada Patent does not prima facie anticipate Applicants' invention, as claimed in independent claims 1, 9 and 16 as well as corresponding dependent claims.

Since Applicants' claimed invention is not prima facie anticipated by the Yamada Patent, Applicants respectfully request the withdrawal of the rejection of claims 1, 2, 4, 6-10 and 14-16 under 35 U.S.C. § 102(b) as being anticipated by the Yamada Patent.

Rejections Under 35 U.S.C. § 103

The Examiner rejected claims 3, 5, 11, 13 and 17 under 35 U.S.C. § 103(a) as being unpatentable over the Yamada Patent. Claims 3 and 5 indirectly depend from claim 1, claims 11 and 13 indirectly depend from claim 9, and claim 17 depends from claim 16. The Yamada Patent does not teach or suggest all of the features of Applicants' invention, as claimed in claims 1, 9 and 16. Specifically, the Yamada patent does not teach or suggest control of the optical path length of the cores of an arrayed waveguide grating to within three nanometers. Since the Yamada patent does not disclose all of the claim elements, the Yamada Patent does not render Applicants' invention prima facie obvious. Since Applicants' claimed invention is not prima facie obvious, Applicants' respectfully request the withdrawal of the rejection of claims 3, 5, 13 and 17 under 35 U.S.C. § 103(a).

While Applicants do not acquiesce in the particular assertions, Applicants do not comment further on the specific issues relating to the dependent claims since they are moot in view of the above analysis.

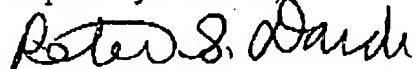
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CONCLUSION

In view of the foregoing, it is submitted that this application is in condition for allowance. Favorable consideration and prompt allowance of the application are respectfully requested.

The Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to advance prosecution.

Respectfully submitted,



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